

REMARKS

Claims 1 to 46 and 58 to 60 are pending in the application. The claims have been rejected as being anticipated by Mallya et al or Plamthottam et al; obvious over Plamthottam et al in view of Cooprider et al; and lacking support under 35 USC §112, first paragraph for a claimed range. These rejections are discussed in more detail below.

Mallya et al

Claims 1-16, 22 and 25-42 stand rejected under 35 U.S.C. §102(b) as anticipated by Mallya et al (U.S. Patent No. 4,812,541). The rejection states that Mallya et al teach a polymer containing (a) 55-85% C₄₋₁₂ alkyl (meth)acrylate ester, (b) 1-10% N-vinyl lactam, (c) 0-15% unsaturated carboxylic acid, and (d) 0.01-2% a cross linkable, glycidyl monomer. The rejection states that the claims are anticipated because “the identities of the types of components that can be used within each class of component is disclosed” and “these are consistent with those listed in the claims of the present invention.” Accordingly, the rejection concludes that the above claims are anticipated by Mallya et al.

As admitted by the rejection, there are no specific compositions of Mallya et al that fall within the compositions of the present claims. The broad disclosures of Mallya et al overlap with a range of the present claims but there are no specific compositions taught by Mallya et al that have each and every limitation of the present claims.

In responding to Applicants’ remarks in the previous amendment, the rejection states that “the examples merely illustrate the invention in a non-limiting manner.” The rejection states that the “unrecited examples that adhere to the claims also fall within the realm of the invention of the prior art.”

Applicants submit that unrecited examples may not anticipate their claims. The prior art must contain specific teachings of each element of the claims to anticipate the claims. General teachings of the prior art may be properly used in an obviousness rejection. Since there are no specific compositions of Mallya et al that teach the

claimed elements of the present claims, Applicants submit that the claims are not anticipated by Mallya et al.

Further, Mallya et al do not render obvious the claims. Mallya et al teach the desirability of having polymers with lower levels of nitrogen containing monomers than claimed by Applicants. Specifically, all the examples of Mallya et al contain less than 4% nitrogen containing monomer. Mallya et al teach away from Applicants' claimed adhesive since Mallya et al teach the desirability of adhesive with lower nitrogen containing monomer content than Applicants' claims.

The pressure sensitive adhesives of the present claims have good adhesive properties as shown by the rivet test performance. The rivet test performance, especially the aged rivet test performance, shows that the pressure sensitive adhesives maintain their good adhesive qualities over time. (See Tables 3 and 4 and the surrounding text). Additionally, these pressure sensitive adhesives have tolerance for migratory additives from substrates such as polymeric substrates. It is known that polyvinyl chloride substrates often contain migratory additives such as plasticizers. These plasticizers migrate into the adhesive and reduce its adhesive properties. The presently claimed pressure sensitive adhesives have tolerance for plasticizers. (See Table 5 and its surrounding text). Additionally, the present pressure sensitive adhesives will provide long term removal. Often over time the cohesive strength of the adhesive layer is reduced and the adhesive layer fractures when the graphic is removed from a truck or a panel. This is undesirable because the adhesive must then be removed from the truck or panel. The present adhesives have improved long term removability by adhering strongly to the graphic substrate. The pressure sensitive adhesive is removed with the graphic substrate and do not leave portions of the adhesive on the truck or panel. (See Table 9 and 10 and its surrounding text).

Claimed ranges or proportions must be different in degree to make the invention as a whole separately patentable over the prior art. (In re Wertheim 191 PQ90 (CCPA 1976); In re Fields 134 PQ242 (CCPA 1962)). As shown above, Applicants claimed range provides different properties than those taught by Mallya et al, namely good

adhesive properties, tolerance for plasticizers, and long term removability. Accordingly, Applicants submit that the claims are not obvious over Mallya et al. Applicants submit that Mallya et al does not render the claims obvious. Applicants therefore request the Examiner to withdrawal the rejection and allow the claims.

Applicants' claims 22 and 25-42 are directed to a blend of polymers which form a pressure sensitive adhesive. The rejection admits that Mallya et al do not teach or suggest a blend of pressure sensitive adhesive polymers. The rejection however then concludes that the claims are anticipated because the blend results in "the overall pressure sensitive adhesive compositions that is essentially the same as that claimed in the parent application".

Applicants submit that this rejection is improper. The rejection has failed to address a specific claim limitation, namely the blend of polymers. The pressure sensitive adhesives of claim 22 and 25- 42 are prepared by blending polymers to form the pressure sensitive adhesives. Mallya et al forms the pressure sensitive adhesives by polymerizing monomers. No additional polymers are used to make the pressure sensitive adhesives of Mallya et al. A blend of polymers is not the same as a polymer prepared from monomers. Therefore, Applicants submit that the rejection is improper and request the Examiner to withdrawal the rejection of claim 22 and 25- 42.

Mallya et al do not teach or suggest the long term removability or plasticizer tolerance as discovered by Applicants.

Plamthottam et al

Claims 1-14, 17, 19-39, 43, 45 and 46 stand rejected under 35 U.S.C. 102 as being anticipated by Plamthottam et al (US 5,639,811). The rejection states that Plamthottam et al teaches a polymer comprised of (a) 55-85% C₄₋₁₂ alkyl (meth)acrylate ester, (b) 0-30% N-vinyl lactam, (c) 0-15% unsaturated carboxylic acid, (d) 0.01-2% of a cross linkable glycidyl monomer and (3) 0-35% C₁₋₄ alkyl (meth) acrylate ester. The rejection states that "the identities of the types of compounds that can be used within each class of components are disclosed" and "these are consistent with those listed in

the claims of the present invention.” Further, the rejection states that Plamthottam et al teaches a tackifier, a plasticizer, and an aluminum acetylacetone.

Applicants submit that Plamthottam et al have no specific disclosure of Applicants’ claimed pressure sensitive adhesive. Plamthottam et al have specific teachings of compositions which have a lower amount of nitrogen containing monomer than Applicants’ claimed adhesive. The general teachings of Plamthottam et al do not provide a basis for an anticipation rejection, for the reasons given above for Mallya et al. The general ranges disclosed by Plamthottam et al may, at best, be used for an obviousness rejection.

Further, Plamthottam et al do not render obvious the claims. Plamthottam et al teach the desirability of having polymers with lower levels of nitrogen containing monomers than claimed by Applicant. Specifically, all the examples of Plamthottam et al contain less than 4 % nitrogen containing monomers. Plamthottam et al teach away from Applicants’ claimed pressure sensitive adhesives. Applicants submit that Plamthottam et al do not render their claims obvious. Applicants therefore request the Examiner to withdrawal the rejection and allow the claims.

As described above with reference to Mallya et al, the pressure sensitive adhesives provide good adhesive properties, plasticizer tolerance, and long term removability. Plamthottam et al do not teach or suggest such properties. For the reasons given above regarding Mallya et al, Applicants submit that claims 1-14, 17, 19-39, 43, 45 and 46 are not obvious over Plamthottam et al.

Claims 22 and 25- 39, 43 and 45 are directed to blends of polymers that form the pressure sensitive adhesive. As admitted by the rejection, Plamthottam et al do not teach or suggest a blend of polymers to form the pressure sensitive adhesive. For the reasons given for Mallya et al, Applicants submit that this is an improper basis for an anticipation rejection of the present claims. Specifically, the rejection fails to address the blend claim limitation. Accordingly, Applicants submit that the rejection is improper and request its withdrawal.

35 U.S.C. § 103(a) Rejection:

Claim 18 and 44 stand rejected under 35 U.S.C. § 103(a) over Plamthottam et al in view of Cooprider et al (U.S. Patent No. 5,517,617). The rejection states that it would be obvious to use the plasticizers of Cooprider et al in the pressure sensitive adhesives of Plamthottam et al.

It is again noted that Plamthottam et al fail to teach a specific pressure sensitive adhesive composition having greater than 4% by weight of a nitrogen containing monomer. As discussed above, Plamthottam et al teach away from Applicants' claimed pressure sensitive adhesives.

Cooprider et al relate to pressure sensitive adhesive compositions which include solid, polymeric, acrylate, inherently tacky, infusible, solvent-insoluble, solvent-dispersible, elastomeric microspheres, and at least about 1% of a micromolecular monomer-containing (macromonomer-containing) elastomeric binder copolymer which have a glass transition temperature of less than -20 degrees C. Additionally, the pressure sensitive adhesive compositions of Cooprider et al can optionally include a plasticizer.

Cooprider et al is used for the purpose of showing that it would be obvious to use standard plasticizer materials in the compositions of Plamthottam et al. However, as discussed above, Plamthottam et al fail to teach or suggest pressure sensitive adhesive compositions with the nitrogen monomer content required by Applicants' claims 18 and 44. Since Cooprider et al is cited for its disclosure of standard materials and not for the monomer content of pressure sensitive adhesives, Applicants submit that Cooprider et al do not make up for the already discussed deficiencies of Plamthottam et al. Therefore, Applicants submit that Plamthottam et al in view of Cooprider et al does not render their claims obvious.

Rejection Under 35 U.S.C. §112

Claims 58-60 stand rejected under 35 U.S.C. §112, first paragraph as containing subject matter not disclosed in the specification. Specifically, the rejection states there is no support for the range of 12-30% for component (b).

The specification must reasonably convey to persons skilled in the art that, as of the filing date, the inventor had possession of the subject matter later claimed by him. (In re Edwards 196 PQ465 (CCPA 1978)). Previously, the disclosure of 60-20°C range in a parent application has been found to support a claimed range of 80-200 (In re Blaser et al 194 USPQ 122 (CCPA 1977)).

Applicants have described the ranges of component (b) at page 6, line 21 through page 7, line 2. Applicants have indicated at page 5, lines 23-24 that the range and ratio limits disclosed in the application may be combined. The objected range of 12-30% is supported because the range limits are disclosed and combined as taught by Applicant. Applicants have disclosed the range so that a person skilled in the art would understand that at the time of filing the inventor had possession of the subject matter. Accordingly, Applicants submit that their ranges disclosed provide support for the claimed range of about 12 to about 30%. In view of the above comments, Applicants request withdrawal of this rejection.

Conclusion:

In view of the above comments, Applicants request withdrawal of the rejection and allowance of claims 1 to 46 and 58 to 60. Should the Examiner believe that a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 under Attorney Docket No. AVERP2511USA.

Respectfully submitted,
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